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Basic Economic Indicators American and Spiny Lobsters 1947-73

Economic Research Laboratory

Washington, D.C.

August 1974

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
National Marine Fisheries Service

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PREFACE

The purpose of "Basic Economic Indicators" is to bring together pertinent economic, technological, and biological data for each major U.S. fishery. The Economic Research Division of the National Marine Fisheries Service (NMFS) has consolidated these basic variables which reflect the economic behavior of a fishery. Having this basic data under one cover will materially aid research and development efforts currently being conducted on each fishery and will serve as a helpful guide to policy decisions. NMFS hopes that these data will be valuable in quantitative analyses of the Nation's fisheries.

It should be noted that some of the data are preliminary. Some figures are estimates based upon the latest research; therefore, the reader should be aware of the nature of these estimates, and is urged to examine the original sources to acquaint himself or herself more fully with how they were derived. The "Basic Economic Indicators" were compiled by the staff of the Economic Research Division with major contributions from Kenneth T. Ellington and Mikolaj G. Wojnowski.

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I. INDUSTRY PERFORMANCE INDICATORS

Table I-1.--Average costs and earnings of inshore American lobster pot boats,
1967 and 1969-71

Item	Unit	1967	1969	1970	1971
Vessels	Number	<u>1/</u> 27	5	7	4
Length of vessels	Feet	34	30	<u>2/</u>	<u>2/</u>
Trips	Number	146	<u>2/</u>	163	150
Average length of trip	Days	1	<u>1</u>	1	1
Crew size	Number	1.5	1.5	1.5	1.5
Time at sea	Days	146	<u>2/</u>	163	150
Landings	Pounds	15,841	12,473	11,240	11,590
Average price*	Cents per pound	86.5	84	98	105
Gross receipts	Dollars per vessel	13,700	10,478	11,015	12,170
Trip expenditures					
Food	do	948	825	<u>2/</u>	<u>2/</u>
Fuel & lube	do	<u>2/</u>	630	691	820
Other	do	<u>2/</u>	1,057	1,041	1,225
Subtotal	do	<u>2/</u>	2,512	1,732	2,045
Repair & maintenance					
Gear & supplies	do	<u>2/</u>	1,075	1,268	1,734
Hull & engine	do	<u>2/</u>	780	939	806
Subtotal	do	<u>2/</u>	1,855	2,207	2,540
Fixed charges					
Interest	do	<u>2/</u>	71	242	152
Insurance	do	<u>2/</u>	254	217	366
Taxes & licenses	do	<u>2/</u>	65	67	145
Administrative & lease	do	<u>2/</u>	834	379	411
Subtotal	do	<u>2/</u>	1,224	906	1,075
TOTAL CASH EXPENDITURES	do	6,223	5,591	4,845	5,660
Share to labor and capital					
Wages	do	<u>3/</u> 6,383	3,357	3,360	3,520
Captain's commission	do	-	-	-	-
Owner's share (before depreciation)	do	<u>3/</u> 1,094	1,530	2,810	2,990
TOTAL SHARE EXPENDITURES	do	7,477	4,787	6,170	6,510
Depreciation	do	516	830	1,152	1,295
Net return before taxes	do	<u>4/</u> 578	700	1,658	1,696

1/Included in the sample are 27 boats from Stonington, Maine, fishing pots.

2/Not available.

3/50 percent of the boats are manned by the owner only (1-man crew), and 50 percent of the boats have a second crew man (family member). The split of share expenditures has been estimated with 6 percent of invested capital plus depreciation going to the owner and with the balance assigned to labor.

4/Interest on loan included.

* Includes American lobster caught by all gear and areas.

Source: Receipts and cost data from National Marine Fisheries Service, Financial Assistance Division.

INDUSTRY PERFORMANCE INDICATORS

Table I-2.--Average costs and earnings of offshore American lobster pot vessels¹, 1970-1972

Item		1970	1971	1972
Vessels	Number	3	5	4
Length of vessels	Feet	49	58	50
Trips	Number	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$
Average length of trip	Days	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$
Crew size	Number	4	4.4	3.75
Time at sea	Days	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$
Landings	Pounds	73,658	87,509	63,570
Average price*	Cents per pound	98	105	123
Gross receipts	Dollars per vessel	72,185	91,885	78,191
Trip expenditures				
Food	do	1,768	2,114	2,345
Fuel & lube	do	2,523	2,091	2,287
Other	do	3,469	5,413	3,370
Subtotal	do	7,760	9,618	8,002
Repair & maintenance				
Gear & supplies	do	10,450	10,902	9,641
Hull & engine	do	3,732	3,262	4,144
Subtotal	do	14,182	14,164	13,785
Fixed charges				
Interest	do	2,272	4,407	2,012
Insurance	do	1,707	5,227	3,511
Taxes & licenses	do	611	1,881	545
Administrative & lease	do	1,625	$\frac{2}{4},963$	$\frac{2}{9},674$
Subtotal	do	6,215	16,478	15,742
TOTAL CASH EXPENDITURES	do	28,157	40,260	37,523
Share to labor and capital				
Wages	do	23,711	38,330	28,453
Captain's commission	do			
Owner's share (before depreciation)	do	20,317	13,296	12,209
TOTAL SHARE EXPENDITURES	do	44,028	51,626	40,662
Depreciation	do	5,987	5,321	8,310
Net return before taxes	do	14,330	7,975	3,890

¹/Not available.

²/In 1971 and 1972, certain vessels in the sample had administrative costs much higher than normal.

* Includes American lobster caught by all gear and areas.

INDUSTRY PERFORMANCE INDICATORS

Table I-3.--Average costs and earnings of American lobster otter trawl vessels, 1967 and 1969

Item	Unit	1967	1969
Vessels	Number	<u>1</u> /17	3
Length of vessels	Feet	71	80.7
Trips	Number	<u>2</u> /11.9/11.8	<u>3</u> /
Average length of trip	Days	8.7	<u>3</u> /
Crew size	Number	5.4	<u>6</u>
Time at sea	Days	207	<u>3</u> /
Landings	Pounds	<u>3</u> /	31
Average price*	Cents per pound	<u>4</u> /38.7	84
Gross receipts	Dollars per vessel	99,355	155,997
Trip expenditures			
Food	do	4,841	3,985
Fuel & lube	do	6,880	9,182
Other	do	5,130	1,392
Subtotal	do	16,851	14,559
Repair & maintenance			
Gear & supplies	do	5,203	5,466
Hull & engine	do	7,992	10,627
Subtotal	do	13,195	16,093
Fixed charges			
Interest	do	<u>3</u> /	2,756
Insurance	do	5,315	5,987
Taxes & licenses	do	<u>3</u> /	2,547
Administrative & lease	do	5,687	8,497
Subtotal	do	11,002	19,787
TOTAL CASH EXPENDITURES	do	41,048	50,439
Share to labor and capital			
Wages	do	47,564	76,708
Captain's commission	do	3,494	6,473
Owner's share (before depreciation)	do	7,249	22,377
TOTAL SHARE EXPENDITURES	do	58,307	105,558
Depreciation	do	3,139	9,903
Net return before taxes	do	<u>5</u> /4,110	12,474

1/ The sample is representative of the Northern lobster otter trawl fishery in New England. It comprises about 32 percent of all vessels

in this fishery.

2/ Lobster trips/flounder trips.

3/ Not available.

4/ Lobster only.

5/ Interest on loan included.

* Includes American lobster caught by all gear and area.

Source: Receipts and cost data from National Marine Fisheries Service, Financial Assistance Division.

INDUSTRY PERFORMANCE INDICATORS

Table I-4.--Average costs and earnings of spiny lobster boats , 1973

Item	Unit	1973
Boats	Number	10
Length of vessels	Feet	33.6
Trips	Number	140
Average length of trip	Days	1
Crew size	Number	1.3
Time at sea	Days	140
Landings ^{1/}	Pounds	10,665
Average price ^{2/}	Cents per pound	107
Gross receipts ^{3/}	Dollars per vessel	14,022
Trip expenditures		
Food	do	77
Fuel & lube	do	682
Bait	do	614
Subtotal	do	1,373
Repair & maintenance		
Gear & supplies	do	2,856
Hull & engine	do	2,503
Subtotal	do	5,359
Fixed charges		
Interest	do	-
Insurance	do	-
Taxes & licenses	do	50
Administrative & lease	do	71
Subtotal	do	121
TOTAL CASH EXPENDITURES	do	6,853
Share to labor and capital		
Wages	do	5,182
Captain's commission	do	-
Owner's share (before depreciation)	do	1,987
TOTAL SHARE EXPENDITURES	do	7,169
Depreciation ^{4/}	do	700
Net return before taxes	do	1,287

^{1/}Spiny lobster only.

^{2/}Spiny lobster.

^{3/}Include receipts for stone crab and finfish.

^{4/}Estimated.

Source: Boat operators in Key West and Marathon, Florida.

INDUSTRY PERFORMANCE INDICATORS

Table I-5.--Average costs and earnings of spiny lobster vessels , 1972-73

Item	Unit	1972	1973
Vessels	Number	4	6
Length of vessels	Feet	34.5	33
Trips	Number	161	131
Average length of trip	Days	1	1
Crew size	Number	1.5	1.7
Time at sea	Days	161	131
Landings ^{1/}	Pounds	20,034	17,070
Average price ^{2/}	Cents per pound	108	106
Gross receipts ^{3/}	Dollars per vessel	22,191	21,769
Trip expenditures			
Food	do	248	250
Fuel & lube	do	602	1,052
Bait	do	1,393	1,080
Subtotal	do	2,243	2,382
Repair & maintenance			
Gear & Supplies	do	3,172	3,702
Hull & engine	do	4,269	2,190
Subtotal	do	7,441	5,892
Fixed charges			
Interest	do	-	-
Insurance	do	-	-
Taxes & licenses	do	50	50
Administrative & lease	do	56	141
Subtotal	do	106	191
TOTAL CASH EXPENDITURES	do	9,790	8,465
Share to labor and capital			
Wages	do	8,980	8,552
Captain's commission	do	-	-
Owner's share (before depreciation)	do	3,421	4,752
TOTAL SHARE EXPENDITURES	do	12,401	13,304
Depreciation ^{4/}	do	2,400	2,500
Net return before taxes	do	1,021	2,252

^{1/}Spiny lobster only.

^{2/}Spiny lobster.

^{3/}Include receipts for stone crab and finfish.

^{4/}Estimated.

Source: Vessel operators in Key West and Marathon, Florida.

INDUSTRY PERFORMANCE INDICATORS

Table I-6.--Earnings of inshore American lobster pot boat fishermen, 1967 and 1969-71

Item	1967	1969	1970	1971
	<u>Number</u>			
Vessels	27 ^{1/}	5	7	4
Average crew size	1.5	1.5	1.5	1.5
	<u>Dollars</u>			
Gross receipts per vessel	13,700	10,478	11,015	12,170
Share to labor per vessel	6,383	3,357	3,360	3,520
Average share per person	4,255	2,238	2,240	2,347
Food expenditures per person	632	550	^{2/}	^{2/}
Average share per person including food	4,887	2,788	2,240	2,347
Real average share per person including food ^{3/}	4,887	2,539	1,926	1,934
Wage in Maine manufacturing	5,244	5,879	6,240	6,583
Real wage in Maine manufacturing	5,244	5,354	5,365	5,427

^{1/} It is representative of boats fishing the entire year. The majority, however, of American lobster boats fish only during the main season, i.e., 15-20 weeks a year.

^{2/} Not available.

^{3/} Divided by the consumer price index 1967=100.

Note: Based on data from table I-1.

INDUSTRY PERFORMANCE INDICATORS

Table I-7.--Earnings of offshore American lobster pot vessel fishermen, 1970-72

Item	1970	1971	1972
	<u>Number</u>		
Vessels	3	5	4
Average crew size	4	4.4	3.75
	<u>Dollars</u>		
Gross receipts per vessel	72,185	91,885	78,191
Share to labor per vessel	23,711	38,330	28,453
Average share per person	5,928	8,711	7,587
Food expenditures per person	442	480	625
Average share per person including food	6,370	9,191	8,212
Real average share per person including food ^{1/}	5,477	7,577	6,554
Wage in New England manufacturing	7,863	8,295	8,751
Real wage in New England manufacturing ^{1/}	6,761	6,838	6,984

^{1/} Divided by the consumer price index 1967=100.

Note: Based on data from table I-2.

INDUSTRY PERFORMANCE INDICATORS

Table I-8.--Earnings of American lobster otter trawl vessel fishermen, 1967 and 1969

Item	1967	1969
	<u>Number</u>	
Vessels	17	3
Average crew size	5.4	6
	<u>Dollars</u>	
Gross receipts per vessel	99,355	155,997
Share to labor per vessel	51,058	83,181
Average share per person	9,455	13,863
Food expenditures per person	896	664
Average share per person including food	10,351	14,527
Real average share per person including food ^{1/}	10,351	13,230
Wage in Massachusetts manufacturing	6,514	7,436
Real wage in Massachusetts manufacturing ^{1/}	6,514	6,772

^{1/} Divided by the consumer price index 1967=100.

Note: Based on data from table I-3.

INDUSTRY PERFORMANCE INDICATORS

Table I-9.--Earnings of spiny lobster vessel fishermen, 1972-73, and spiny lobster boat fisherman, 1973

Item	On vessels		On boats
	1972	1973	1973
	<u>-----Number-----</u>		<u>Number</u>
Vessels	4	6	10
Average crew size	1.5	1.7	1.3
	<u>-----Dollars-----</u>		<u>Number</u>
Gross receipts per vessel	22,191	21,769	14,022
Share to labor per vessel	8,980	8,552	5,182
Average share per man	5,987	5,030	3,986
Food expenditures per man	165	147	59
Average share per man including food	6,152	5,177	4,045
Real average share per man including food <u>1/</u>	4,910	3,890	3,039
Wage in Florida manufacturing <u>2/</u>	8,152	8,560	8,560
Real wage in Florida manufacturing <u>1/</u>	6,506	6,431	6,431

1/ Divided by the consumer price index 1967=100.

2/ Estimated.

Note: Based on data from tables I-4 and I-5.

INDUSTRY PERFORMANCE INDICATORS

Table I-10.--Productivity of American lobster fishermen and vessels or boats, 1947-71

Year	Landings per fisherman :		Landings per vessel & boat :		Landings per lobster pot
	Pot fishery:	Trawl fishery :	Pot fishery:	Trawl fishery :	
	Pounds				
1947	2,746	1/	2,937	1/	35.5
1948	2,622	1/	2,835	1/	34.0
1949	3,038	1/	3,237	1/	40.3
1950	3,172	1/	3,341	1/	39.6
1951	3,900	1/	4,087	1/	50.2
1952	3,462	1/	3,686	1/	45.3
1953	3,711	1/	4,192	1/	48.3
1954	3,440	1/	3,580	1/	42.4
1955	3,584	1/	3,701	1/	41.7
1956	3,206	1/	3,352	1/	38.1
1957	3,775	1/	3,937	1/	42.6
1958	3,221	1/	3,452	1/	34.7
1959	3,294	1/	3,406	1/	32.4
1960	3,385	1/	3,584	1/	34.8
1961	3,142	13,053	3,260	54,439	28.6
1962	3,465	19,869	3,625	77,771	29.4
1963	3,619	21,971	4,028	86,000	31.4
1964	3,410	11,208	3,820	54,547	29.7
1965	3,100	12,868	3,379	62,148	26.1
1966	3,387	9,454	3,704	44,988	27.0
1967	2,959	7,307	3,260	34,422	24.3
1968	3,429	7,934	3,761	37,607	27.8
1969	3,253	10,253	3,484	48,993	25.3
1970	2,874	11,286	3,085	51,768	18.5
1971	2,909	10,021	3,172	43,622	17.9

1/ Not available.

Source: Fishery Statistics of the U.S., various years.

INDUSTRY PERFORMANCE INDICATORS

Table I-11.--Productivity of spiny lobster pot fishermen and vessels or boats, 1950-71

Year	Landings per fisherman	Landings per vessel or boat	Landings per pot
	-----Pounds-----		
1950	3,463	6,633	127.6
1951	6,138	12,295	172.1
1952	<u>1</u> /	<u>1</u> /	<u>1</u> /
1953	<u>1</u> /	<u>1</u> /	84.5
1954	<u>1</u> /	<u>1</u> /	74.9
1955	10,838	14,535	68.2
1956	10,603	15,775	86.0
1957	<u>1</u> /	<u>1</u> /	95.0
1958	6,682	10,193	74.3
1959	6,123	8,552	54.7
1960	4,899	7,860	37.5
1961	5,352	8,827	50.8
1962	4,581	8,106	41.5
1963	6,309	11,362	47.1
1964	3,998	7,469	32.0
1965	5,838	11,492	40.4
1966	4,802	8,587	34.6
1967	3,569	6,851	24.0
1968	4,448	9,980	34.8
1969	6,084	11,831	42.6
1970	7,989	16,795	44.6
1971	8,246	18,144	35.6

1/ Not available.

Source: Fishery Statistics of the United States, various years.

INDUSTRY PERFORMANCE INDICATORS

Table I-12.--Cost per pound of American lobster landed by inshore pot boats, 1967 and 1969-71

Item	Unit	1967	1969	1970	1971
Landings	Pounds	15,841	12,473	11,240	11,590
Gross receipts	Dollars per boat	13,700	10,478	11,015	12,170
Average price	Cents per pound	86.5	84	94.6	105
Total expenditures	Dollars per boat	13,122	9,778	9,357	10,474
Trip expenditures	Cents per pound	<u>1</u> /	20.1	14.9	17.6
Repair and maintenance	do	<u>1</u> /	14.9	18.9	21.9
Fixed charges	do	<u>1</u> /	9.8	7.8	9.3
Share to labor	do	40.3	26.9	28.9	30.4
Depreciation	do	3.3	6.7	9.9	11.2
Cost per unit of output	do	82.8	78.4	80.4	90.4

1/ Not available.

Note: Based on data from Table I-1.

INDUSTRY PERFORMANCE INDICATORS

Table I-13.--Cost per pound of American lobster landed by offshore pot vessels, 1970-72

Item	Unit	1970	1971	1972
Landings	Pounds	67,970	79,279	58,048
Gross receipts	Dollars per vessel	72,185	91,855	78,191
Average price	Cents per pound	106.2	115.9	134.7
Total expenditures	Dollars per vessel	57,855	80,274	67,438
Trip expenditures	Cents per pound	11.4	12.1	13.8
Repair and maintenance	do	20.9	17.9	23.8
Fixed charges	do	9.1	16.2	15.3
Share to labor	do	34.9	48.3	49.0
Depreciation	do	8.8	6.7	14.3
Cost per unit of output	do	85.1	101.2	116.2

Note: Based on data from Table I-1.

INDUSTRY PERFORMANCE INDICATORS

Table I-14.--Cost per pound of American lobster landed by otter trawl vessels, 1967 and 1969

Item	Unit	1967	1969
Landings	Pounds	<u>1/</u>	<u>1/</u>
Gross receipts	Dollars per vessel	99,355	155,997
Average price	Cents per pound	83.7	88.2
Total expenditures	Dollars per vessel	95,245	143,523
Trip expenditures	Cents per pound	14.2	8.2
Repair and maintenance	do	11.1	9.1
Fixed charges	do	9.3	11.2
Share to labor	do	43.0	47.0
Depreciation	do	2.6	5.6
Cost per unit of output	do	80.2	81.1

1/ Not available.

Note: Based on data from Table I-2.

INDUSTRY PERFORMANCE INDICATORS

Table I-15.--Cost per pound of spiny lobster landed by pot boats, 1973^{1/}

Item	Unit	1973
Landings ^{2/}	Pounds	10,665
Gross receipts ^{3/}	Dollars per boat	14,022
Average price ^{4/}	Cents per pound	107
Total expenditures	Dollars per boat	12,735
Trip expenditures	Cents per pound	10.5
Repair and maintenance	do	40.9
Fixed charge	do	.9
Share to labor	do	39.5
Depreciation	do	5.3
Cost per unit of output	do	97.1

^{1/}Boats operated out of Marathon and Key West, Florida.

^{2/}Spiny lobster only.

^{3/}Includes receipts for finfish and stone crab.

^{4/}For spiny lobster.

Note: Based on data from Table I-3.

INDUSTRY PERFORMANCE INDICATORS

Table I-16.--Cost per pound of spiny lobster landed by pot vessels, 1972-73^{1/}

Item	Unit	1972	1973
Landings ^{2/}	Pounds	20,034	17,070
Gross receipts ^{3/}	Dollars per vessel	22,191	21,769
Average price ^{4/}	Cents per pound	108	106
Total expenditures	Dollars per vessel	21,170	19,517
Trip expenditures	Cents per pound	10.9	11.6
Repair and maintenance	do	36.2	28.7
Fixed charges	do	.5	.9
Share to labor	do	43.7	41.6
Depreciation	do	11.7	12.2
Cost per unit of output	do	103.0	95.0

^{1/}Vessels operated out of Marathon and Key West, Florida.

^{2/}Spiny lobster only.

^{3/}Includes receipts for finfish and stone crab.

^{4/}For spiny lobster.

Note: Based on data from Table I-4.

INDUSTRY PERFORMANCE INDICATORS

Table I-17.--Estimated market value of an inshore American lobster pot boat based on present value of future returns^{1/}

Discount rate ^{2/}	Expected useful life in years			
	5	10	15	20
	-----Market value in dollars-----			
Percent				
12	11,300	17,800	21,400	23,500
18	9,800	14,100	16,000	16,800
24	8,600	11,600	12,600	12,900

^{1/} Based on data from table I-1, net return before taxes, plus depreciation plus interest paid for 1971 was \$3,143. This figure was used to calculate the above estimated market value.

^{2/} Arbitrarily chosen.

Table I-18.--Estimated market value of an offshore American lobster pot vessel based on present value of future returns^{1/}

Discount rate ^{2/}	Expected useful life in years			
	5	10	15	20
	-----Market value in dollars-----			
Percent				
12	76,000	119,100	143,500	157,400
18	65,900	94,800	107,300	112,800
24	57,800	77,600	84,300	86,600

^{1/} Based on data from table I-2: net return before taxes, plus depreciation plus the interest paid for 1972 was \$21,075. This figure was used to calculate the above estimated market value.

^{2/} Arbitrarily chosen.

INDUSTRY PERFORMANCE INDICATORS

Table I-19.--Estimated market value of an offshore American lobster
otter trawl vessel based on present value of future
returns^{1/}

Discount rate ^{2/}	Expected useful life in years			
	5	10	15	20
	-----Market value in dollars-----			
<u>Percent</u>				
12	90,600	142,000	171,200	187,700
18	78,600	113,100	128,000	134,500
24	69,000	92,500	100,600	103,300

^{1/} Based on data from table I-3: Net return before taxes, plus depreciation, plus interest paid for 1969 was \$25,133. This figure was used to calculate the above estimated market values.

^{2/} Arbitrarily chosen.

Table I-20.--Estimated market value of a spiny lobster boat based on present value
of future returns^{1/}

Discount rate ^{2/}	Expected useful life in years			
	5	10	15	20
	-----Market value in dollars-----			
<u>Percent</u>				
12	7,163	11,226	13,533	14,840
18	6,213	8,939	10,118	10,636
24	5,454	7,316	7,950	8,166

^{1/}Based on data from Table I-5. : Net return before taxes, plus depreciation for 1973 was \$1,987. This figure was used to calculate the above estimated market value.

^{2/}Arbitrarily chosen.

INDUSTRY PERFORMANCE INDICATORS

Table I-21.--Estimated market value of a spiny lobster vessel based on present value of future returns^{1/}

Discount rate ^{2/}	Expected useful life in years			
	5	10	15	20
	-----Market value in dollars-----			
<u>Percent</u>				
12	14,730	23,086	27,830	30,518
18	12,777	18,382	20,806	21,872
24	11,216	15,045	16,348	16,793

^{1/}Based on data from Table I-4.: Net return before taxes, plus depreciation for the average of 1972-73 was \$4,086. This figure was used to calculate the above estimated market values.

^{2/}Arbitrarily chosen.

Table I-22.--Historical growth rate of American lobster landings, fishermen, vessels, and boats, 1947-73

Landings ^{1/}	1947-73	+ 1.3	percent per year
Fishermen ^{2/}	1947-71	+ .7	percent per year
Vessels and boats ^{3/}	1947-71	+ .3	percent per year

^{1/} Log of landings (thousand pounds) 4.37604 + .0056 time.
(7.32)*

^{2/} Log of number of fishermen = 3.86977 + .0029 time.
(3.25)*

^{3/} Log of number of vessels and boats = 3.85528 + .0012 time.
(1.13)*

*Indicates t value.

INDUSTRY PERFORMANCE INDICATORS

Table I-23.--Historical growth rate of spiny lobster landings, fishermen, vessels, and boats, 1947-73

Landings ^{1/}	1947-73	+6.0 percent per year
Fishermen ^{2/}	1950-51, 1955-56, 1958-71	+6.2 percent per year
Vessels and boats ^{3/}	1950-51, 1955-56, 1958-71	+5.0 percent per year

1/Log of landings (thousand pounds) = 3.34689 + .0251 time.
(8.71)*

2/Log of number of fishermen = 2.56781 + .0261 time.
(4.83)*

3/Log of number of vessels and boats = 2.38184 + .0211 time.
(5.71)*

*Indicates t value.

II. DEMAND INDICATORS

Table II-1.--U.S. lobster consumption: aggregate and per capita, 1947-72

(Edible weight)

Year	Aggregate			Per capita		
	American	Spiny	Total	American	Spiny	Total
	-----Thousand pounds-----			-----Pounds-----		
1947	10,891	3,400	14,291	0.0755	0.0236	0.0991
1948	11,028	4,108	15,136	.0751	.0280	.1031
1949	12,015	5,181	17,196	.0804	.0347	.1151
1950	11,956	6,895	18,851	.0787	.0454	.1241
1951	13,069	8,161	21,230	.0848	.0530	.1378
1952	12,794	8,336	21,130	.0818	.0533	.1351
1953	13,326	10,459	23,785	.0838	.0658	.1496
1954	13,179	10,377	23,556	.0814	.0641	.1455
1955	13,699	11,786	25,485	.0829	.0714	.1543
1956	13,047	11,800	24,847	.0776	.0702	.1478
1957	13,963	14,910	28,873	.0815	.0871	.1686
1958	13,225	13,601	26,826	.0759	.0781	.1540
1959	13,599	14,684	28,283	.0767	.0829	.1596
1960	14,447	16,739	31,186	.0802	.0930	.1732
1961	14,042	16,878	30,920	.0767	.0922	.1689
1962	14,498	18,608	33,106	.0779	.1001	.1780
1963	14,494	22,224	36,718	.0768	.1178	.1946
1964	13,711	23,309	37,020	.0716	.1218	.1934
1965	13,310	22,172	35,482	.0686	.1144	.1830
1966	12,576	22,766	35,342	.0641	.1162	.1803
1967	11,714	24,258	35,972	.0592	.1226	.1818
1968	13,061	26,480	39,541	.0653	.1325	.1978
1969	13,536	31,157	44,693	.0672	.1547	.2219
1970	13,454	26,790	40,244	.0660	.1314	.1974
1971	13,346	29,008	42,354	.0647	.1406	.2053
1972	11,991	30,513	42,504	.0574	.1443	.2017

Source: Fishery Statistics of the United States, various years, and U.S. Imports, Bureau of the Census.

DEMAND INDICATORS

Table II-2.--U.S. consumption of lobsters (fresh and frozen) by socio-economic characteristics, 1969^{1/}

(Retail weight)

Socio-economic characteristics	1969				
	1st Qtr.	2d Qtr.	3d Qtr.	4th Qtr.	Total
-----Pounds per capita-----					
<u>RACE</u>					
Black	0.030	0.020	0.012	0.002	0.064
White	.018	.084	.038	.034	.174
Other	.000	.000	.517	.000	.517
Not specified	.000	.000	.000	.000	.000
<u>RELIGION</u>					
Catholic	.034	.081	.041	.076	.232
Jewish	.008	.042	.000	.000	.050
Protestant	.014	.084	.039	.022	.159
Other	.000	.000	.000	.000	.000
Not specified	.000	.000	.000	.000	.000
<u>INCOME PER CAPITA</u>					
Under 1,000	.003	.000	.000	.000	.003
1,000-1,999	.030	.128	.069	.001	.228
2,000-2,499	.000	.017	.013	.006	.036
2,500-2,999	.021	.034	.031	.027	.113
3,000-3,499	.008	.127	.005	.031	.171
3,500 & over	.026	.086	.042	.100	.254
<u>OCCUPATION</u>					
Prof. & semiprofessional	.024	.039	.043	.006	.112
Proprietors, managerial	.024	.074	.009	.019	.126
Clerical & sales	.020	.074	.069	.156	.319
Craftsmen, foreman	.015	.181	.079	.010	.285
Head operative	.006	.005	.000	.000	.011
Service workers & laborers	.018	.068	.022	.015	.123
<u>EDUCATION</u>					
Less than 4 yr high school	.032	.150	.069	.069	.320
Less than 4 yr college	.010	.035	.020	.013	.078
College grad.	.014	.072	.026	.017	.129
Head, not specified	.000	.000	.000	.000	.000
<u>REGION</u>					
New England	.109	.841	.539	.189	1.678
Middle Atlantic	.038	.048	.007	.019	.112
E. North Cent.	.000	.002	.007	.011	.020
W. North Cent.	.000	.000	.000	.005	.005
South Atlantic	.012	.111	.006	.011	.140
E. South Cent.	.010	.082	.017	.007	.116
W. South Cent.	.001	.000	.003	.000	.020
Mountain	.000	.020	.000	.000	.020
Pacific	.013	.004	.002	.001	.020

^{1/} Purchases by households for home use from a stratified sample and divided by number in household.

DEMAND INDICATORS

Table II-3.--U.S. consumption of lobster tails (fresh and frozen)
by socio-economic characteristics, 1969^{1/}

(Retail weight)

Socio-economic characteristics	1969				
	1st Qtr.	2d Qtr.	3d Qtr.	4th Qtr.	Total
	-----Pounds per capita-----				
<u>RACE</u>					
Black	0.062	0.037	0.038	0.074	0.211
White	.048	.021	.030	.032	.131
Other	.000	.000	.000	.000	.000
Not specified	.000	.000	.000	.000	.000
<u>RELIGION</u>					
Catholic	.100	.023	.057	.052	.232
Jewish	.078	.000	.008	.074	.160
Protestant	.033	.022	.025	.028	.108
Other	.000	.000	.000	.000	.000
Not specified	.178	.000	.000	.000	.178
<u>INCOME PER CAPITA</u>					
Under 1,000	.012	.003	.000	.001	.016
1,000-1,999	.048	.030	.045	.038	.161
2,000-2,499	.000	.006	.008	.044	.058
2,500-2,999	.144	.018	.058	.034	.254
3,000-3,499	.006	.012	.013	.040	.071
3,500 & over	.082	.030	.033	.035	.180
<u>OCCUPATION</u>					
Prof. & semiprofessional	.020	.011	.012	.025	.068
Proprietors, managerial	.027	.007	.014	.047	.095
Clerical & sales	.018	.027	.052	.034	.131
Craftsmen, foremen	.038	.018	.013	.025	.094
Head operative	.081	.009	.010	.024	.124
Service workers & laborers	.100	.053	.081	.044	.278
<u>EDUCATION</u>					
Less than 4 yr high school	.026	.032	.043	.031	.132
Less than 4 yr college	.066	.015	.027	.033	.141
College grad.	.042	.018	.014	.036	.110
Head, not specified	.041	.011	.050	.133	.235
<u>REGION</u>					
New England	.006	.004	.027	.010	.047
Middle Atlantic	.108	.025	.029	.049	.211
E. North Cent.	.077	.032	.039	.035	.183
W. North Cent.	.018	.000	.002	.004	.024
South Atlantic	.012	.023	.020	.030	.085
E. South Cent.	.034	.047	.178	.083	.342
W. South Cent.	.000	.000	.001	.003	.004
Mountain	.127	.021	.012	.071	.231
Pacific	.022	.021	.008	.030	.081

^{1/} Purchases by households for home use from a stratified sample and divided by number in households.

DEMAND INDICATORS

Table II-4.--U.S. consumption of lobsters and lobster tails (fresh and frozen) by socio-economic characteristics, 1969^{1/}

(Retail weight)

Socio-economic characteristics	1969				Total
	1st Qtr.	2d Qtr.	3d Qtr.	4th Qtr.	
	-----Pounds per capita-----				
<u>RACE</u>					
Black	0.092	0.057	0.074	0.076	0.299
White	.066	.105	.068	.068	.307
Other	.000	.000	.517	.000	.517
Not specified	.000	.000	.000	.000	.000
<u>RELIGION</u>					
Catholic	.134	.104	.098	.128	.464
Jewish	.086	.042	.008	.074	.210
Protestant	.047	.106	.064	.050	.267
Other	.000	.000	.000	.000	.000
Not specified	.178	.000	.000	.000	.178
<u>INCOME PER CAPITA</u>					
Under 1,000	.015	.003	.000	.001	.019
1,000-1,999	.078	.158	.114	.039	.389
2,000-2,499	.000	.023	.021	.050	.094
2,500-2,999	.165	.052	.089	.061	.367
3,000-3,499	.014	.139	.075	.071	.299
3,500 & over	.108	.116	.018	.135	.377
<u>OCCUPATION</u>					
Prof. & semiprofessional	.044	.050	.055	.031	.180
Proprietors, managerial	.051	.081	.023	.066	.221
Clerical & sales	.038	.101	.021	.190	.350
Craftsmen, foremen	.053	.199	.092	.035	.379
Head operative	.087	.014	.010	.024	.135
Service workers & laborers	.118	.121	.103	.059	.401
<u>EDUCATION</u>					
Less than 4 yr high school	.058	.182	.112	.100	.452
Less than 4 yr college	.076	.050	.047	.046	.219
College grad.	.056	.090	.040	.053	.239
Head, not specified	.041	.011	.050	.133	.235
<u>REGION</u>					
New England	.115	.845	.566	.199	1.725
Middle Atlantic	.146	.073	.036	.068	.323
E. North Cent.	.077	.034	.046	.046	.203
W. North Cent.	.018	.000	.002	.009	.029
South Atlantic	.024	.134	.026	.035	.219
E. South Cent.	.044	.129	.195	.090	.458
W. South Cent.	.001	.000	.004	.003	.008
Mountain	.127	.041	.012	.071	.251
Pacific	.035	.025	.010	.031	.101

^{1/} Purchases by households for home use from a stratified sample and divided by number in households.

DEMAND INDICATORS

Table II-5.--Exvessel, wholesale, and retail prices of American lobsters, 1947-72

Year	Exvessel ^{1/}	Wholesale ^{2/}	Retail ^{3/}
-----Dollars per pound-----			
1947	0.373	<u>4/</u>	<u>4/</u>
1948	.404	<u>4/</u>	<u>4/</u>
1949	.348	<u>4/</u>	<u>4/</u>
1950	.349	<u>4/</u>	<u>4/</u>
1951	.348	<u>4/</u>	<u>4/</u>
1952	.425	<u>4/</u>	<u>4/</u>
1953	.377	<u>4/</u>	<u>4/</u>
1954	.373	<u>4/</u>	<u>4/</u>
1955	.384	<u>4/</u>	<u>4/</u>
1956	.443	<u>4/</u>	<u>4/</u>
1957	.367	<u>4/</u>	<u>4/</u>
1958	.490	<u>4/</u>	<u>4/</u>
1959	.504	0.99	1.43
1960	.457	.89	1.128
1961	.532	1.02	1.47
1962	.507	.95	1.37
1963	.554	.98	1.41
1964	.662	1.14	1.64
1965	.752	1.36	1.96
1966	.784	1.32	1.90
1967	.809	1.42	2.04
1968	.848	1.47	2.12
1969	.880	1.47	2.12
1970	.980	1.63	2.34
1971	1.080	1.87	2.69
1972	1.366	2.18	3.13

^{1/} Weighted average price paid to Maine fishermen. Historical Statistics No. 12 and, Shellfish Situation and Outlook.

^{2/} Fishery Statistics of the U.S. and Shellfish Situation and Outlook, average price for 1-1/4 pound live American lobster at New York.

^{3/} Estimated from the wholesale price of American lobster by applying estimated margins for 1967.

^{4/} Not available.

DEMAND INDICATORS

Table II-6.--Exvessel, wholesale, and retail value of American lobsters,
1947-72

Year	Exvessel ^{1/}	Wholesale ^{2/3/}	Retail ^{2/ 3/}
	-----Thousand dollars-----		
1947	8,992	31,613	45,454
1948	8,728	32,539	46,785
1949	8,904	33,085	47,570
1950	8,346	33,187	47,717
1951	9,379	35,462	50,988
1952	10,556	40,881	58,779
1953	10,870	41,328	59,422
1954	10,486	39,641	56,996
1955	11,302	43,924	63,155
1956	11,908	45,867	65,948
1957	11,512	44,339	63,751
1958	13,218	48,427	69,629
1959	14,468	61,195	88,392
1960	14,251	58,442	84,052
1961	14,572	65,104	93,827
1962	14,953	62,605	90,283
1963	16,769	64,563	92,892
1964	19,856	71,048	102,210
1965	21,957	82,211	118,480
1966	22,266	75,454	108,607
1967	22,389	75,606	108,618
1968	25,452	83,095	127,135
1969	28,998	95,016	136,615
1970	33,464	106,438	153,038
1971	35,066	115,089	165,477
1972	36,052	120,662	173,490

^{1/} Fishery Statistics of the United States, various years.

^{2/} Includes imports.

^{3/} Estimated.

DEMAND INDICATORS

Table II-7.--Retail price of American lobsters, 1959-72

Year	Actual price ^{1/}	Actual price divided by consumer price index (1967=100)	Actual price divided by consumer price index for meat, poultry, and fish (1967=100)
-----Dollars per pound-----			
1959	1.43	1.64	1.58
1960	1.28	1.44	1.44
1961	1.47	1.64	1.65
1962	1.37	1.51	1.50
1963	1.41	1.54	1.56
1964	1.64	1.77	1.85
1965	1.96	2.04	2.07
1966	1.90	1.95	1.85
1967	2.04	2.04	2.04
1968	2.12	2.03	2.07
1969	2.12	1.93	1.91
1970	2.34	2.01	2.01
1971	2.69	2.22	2.30
1972	3.13	2.50	2.44

^{1/}Estimated from the wholesome price of American lobster by applying estimated margins for 1967.

Source: Table II-4 and Bureau of Labor Statistics.

DEMAND INDICATORS

Table II-6.--Exvessel, wholesale, and retail price
of spiny lobster, 1947-72

Year	Exvessel ^{1/}	Wholesale ^{2/}	Retail ^{3/}
-----Cents per pound-----			
1947	25.3	<u>4/</u>	<u>4/</u>
1948	28.8	<u>4/</u>	<u>4/</u>
1949	20.4	<u>4/</u>	<u>4/</u>
1950	23.1	<u>4/</u>	<u>4/</u>
1951	22.7	<u>4/</u>	<u>4/</u>
1952	30.6	<u>4/</u>	<u>4/</u>
1953	27.4	<u>4/</u>	<u>4/</u>
1954	29.4	<u>4/</u>	<u>4/</u>
1955	30.5	<u>4/</u>	<u>4/</u>
1956	31.4	<u>4/</u>	<u>4/</u>
1957	32.0	<u>4/</u>	<u>4/</u>
1958	34.2	<u>4/</u>	<u>4/</u>
1959	34.3	<u>4/</u>	<u>4/</u>
1960	41.9	114.5	149.8
1961	39.1	133.5	174.6
1962	42.6	144.0	188.4
1963	43.0	134.5	175.9
1964	46.0	165.5	216.5
1965	58.1	220.0	287.8
1966	49.3	206.5	270.1
1967	64.2	217.5	487.6
1968	71.8	274.5	359.0
1969	71.9	296.5	387.8
1970	61.2	270.0	353.2
1971	93.7	383.5	501.6
1972	103.4	412.0	538.9

^{1/} Round weight basis - to convert to tail weight basis
multiply by 3.00.

^{2/} Tail weight basis - average annual price for warm and
cold water lobster tails.

^{3/} Estimated.

^{4/} Not available.

Source: Fishery Statistics of the United States, various years and Shellfish Situation and
outlook, 1972.

DEMAND INDICATORS

Table II-9.--Price and income elasticities for lobster^{1/}

Price elasticity = -.647

Income elasticity = +1.953

Demand Equation for United States, 1947-72 (In logarithms)

$C/N = -7.4829 - 0.64714 P + 1.95315 Y/N$

6.18*

12.77*

$R^2 = 0.93$

D-W = 1.015

*t values

C = Lobster aggregate consumption

P = Real exvessel price of lobster

Y = Real disposable personal income

N = United States population

^{1/}All lobster.

III. DEMAND PROJECTIONS

Table III-1.--Demand and supply projections for all lobsters, United States and world, to the year 2000

(Round weight)

Year	United States per capita consumption	United States population	United States aggregate consumption	World aggregate consumption
	<u>Pounds</u>	<u>Millions</u>	<u>-----Million pounds-----</u>	
1971 ^{1/}	1.03	206.0	212	362
1975	1.21	219.4	266	394
1980	1.25	235.2	295	424*
1985	1.19	252.9	302	424
1990	1.13	270.8	307	424
2000	1.02	307.8	315	424

- Assumptions:
- (1) Declining income elasticity over time;
 - (2) A logistic biological yield curve with a decreasing returns production function;
 - (3) Present fishery management schemes continue into future;
 - (4) Relative prices of fishery product variable over time (i.e., cost of production derived from (2) allowed to interact with demand);
 - (5) Projected per capita income and population given by U.S. Department of Agriculture by country;

^{1/} Actual data,

* Reaches MSY.

Source: Bell, Frederick W., D.A. Nash, E.W. Carlson, F.V. Waugh, R.K. Kinoshita, and R. Fullenbaum, The Future of the World's Fishery Resources: Forecasts of Demand, Supply and Prices to the Year 2000 With a Discussion of Implications for Public Policy, Economic Research Laboratory, National Marine Fisheries Service, File Manuscript, December 1970, 419 p.

IV. DOMESTIC PRODUCTION

Table IV-1.-- U.S. landings of American lobster, 1947-73

(Round weight)

Year	Quantity	Value
	<u>Thousand pounds</u>	<u>Thousand dollars</u>
1947	23,927	8,992
1948	20,987	8,728
1949	24,656	8,904
1950	23,198	8,346
1951	25,946	9,379
1952	25,031	10,556
1953	28,115	10,870
1954	27,481	10,486
1955	28,954	11,302
1956	26,520	11,908
1957	30,155	11,512
1958	27,227	13,218
1959	29,085	14,468
1960	31,168	14,251
1961	27,998	14,572
1962	29,497	14,953
1963	30,274	16,769
1964	30,958	19,856
1965	30,246	21,957
1966	29,541	22,266
1967	26,745	22,389
1968	32,558	25,452
1969	33,787	28,998
1970	34,152	33,464
1971	33,347	35,066
1972	29,278	36,052
1973	29,035	41,917

Source: Fishery Statistics of the United States, various years.

DOMESTIC PRODUCTION

Table IV-2.--U.S. landings of American lobster by major States, 1947-72

(Round weight)

Year	Maine	Mass.	Other	Total
	-----Thousand pounds-----			
1947	18,277	3,671	1,979	23,927
1948	15,923	3,212	1,843	20,987
1949	19,273	3,563	1,820	24,656
1950	18,353	3,113	1,732	23,198
1951	20,759	3,719	1,468	25,946
1952	20,036	3,496	1,500	25,032
1953	22,300	3,775	2,040	28,115
1954	21,688	3,459	2,334	27,481
1955	22,718	3,540	2,696	28,954
1956	20,572	3,411	2,537	26,520
1957	24,403	3,332	2,420	30,155
1958	21,312	3,213	2,752	27,277
1959	22,329	3,528	3,228	29,085
1960	24,014	3,505	3,649	31,168
1961	20,918	3,303	3,767	27,988
1962	22,075	4,282	3,140	29,497
1963	22,804	4,506	2,964	30,274
1964	21,413	5,488	4,057	30,958
1965	18,862	6,360	5,024	30,246
1966	19,916	4,828	4,797	29,541
1967	16,489	4,706	5,550	26,745
1968	20,502	4,817	7,239	32,558
1969	19,835	4,965	8,987	33,787
1970	18,172	5,685	10,295	34,152
1971	17,558	1,709	14,080	33,347
1972	16,256	2,215	10,807	29,278

Source: Fishery Statistics of the United States, various years.

DOMESTIC PRODUCTION

Table IV-3.--U.S. landings and value of spiny lobster by State, 1947-73

Year	Florida				California		Total	
	East Coast		West Coast		Quantity	Value	Quantity	Value
	Quantity	Value	Quantity	Value				
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1947	1/	1/	1/	1/	593	189	1/	1/
1948	1/	1/	1/	1/	563	229	1/	1/
1949	1/	1/	1/	1/	834	284	1/	1/
1950	932	168	628	113	934	296	2,494	577
1951	2,020	384	1,077	205	825	302	3,922	891
1952	657	164	957	239	807	337	2,421	740
1953	1,121	224	874	175	750	353	2,745	752
1954	1,223	269	724	159	902	409	2,849	837
1955	1,079	248	1,216	280	859	434	3,154	962
1956	799	228	2,314	597	736	385	3,849	1,210
1957	651	200	3,388	923	648	377	4,687	1,500
1958	623	184	2,332	653	633	389	3,588	1,226
1959	543	176	2,637	778	506	306	3,686	1,260
1960	719	281	2,129	820	351	236	3,199	1,337
1961	702	249	2,101	721	419	284	3,222	1,254
1962	2/704	2/274	2,435	928	517	354	3,656	1,556
1963	815	328	2,771	1,081	584	381	4,170	1,790
1964	786	351	2,845	1,212	447	309	4,078	1,872
1965	1,329	752	4,385	2,467	480	385	6,194	3,604
1966	1,686	810	3,664	1,659	489	409	5,839	2,878
1967	1,677	1,058	2,737	1,675	450	388	4,864	3,121
1968	2,234	1,580	3,921	2,828	312	293	6,467	4,701
1969	2,929	1,933	4,653	3,325	309	347	7,891	5,605
1970	3,018	1,830	6,852	4,088	476	416	10,346	6,334
1971	3,418	2,932	4,788	4,124	223	1/	8,439	7,907
1972	6,267	6,254	5,149	5,517	391	1/	11,807	11,771
1973	5,622	5,748	5,550	5,914	204	345	11,376	12,007

1/Not available.

2/May include small quantities landed in Georgia, Mississippi, Hawaii, South Carolina, and Alabama.

Source: Fishery Statistics of the United States, various years.

V. DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-1.--Number of fishermen, vessels, and boats in the U.S. American lobster fishery, 1947-71

Year	Fishermen			Vessels and boats		
	Pot	Trawl	Total	Pot	Trawl	Total
	Number					
1947	8,712	1/	8,712	8,146	1/	8,146
1948	8,003	1/	8,003	7,404	1/	7,404
1949	8,117	1/	8,117	7,618	1/	7,618
1950	7,224	1/	7,224	6,858	1/	6,858
1951	6,608	1/	6,608	6,300	1/	6,300
1952	7,130	1/	7,130	6,695	1/	6,695
1953	7,413	1/	7,413	6,563	1/	6,563
1954	7,740	1/	7,740	7,437	1/	7,437
1955	7,781	1/	7,781	7,534	1/	7,534
1956	7,917	1/	7,917	7,573	1/	7,573
1957	7,777	1/	7,777	7,457	1/	7,457
1958	8,117	1/	8,117	7,574	1/	7,574
1959	8,426	1/	8,426	8,148	1/	8,148
1960	8,668	1/	8,668	8,188	1/	8,188
1961	8,472	171	8,643	8,165	41	8,206
1962	7,713	137	7,850	7,374	35	7,409
1963	7,518	137	7,655	6,756	35	6,791
1964	7,871	365	8,236	7,028	75	7,103
1965	7,980	425	8,405	7,321	88	7,409
1966	7,560	414	7,974	6,914	87	7,001
1967	7,467	636	8,103	6,778	135	6,913
1968	7,850	711	8,561	7,105	150	7,255
1969	8,278	669	8,947	7,728	140	7,868
1970	9,398	633	10,031	8,756	138	8,894
1971	9,679	518	10,197	8,876	119	8,995

1/ Not available.

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-2.--Number of fishermen in the American lobster pot fishery by region, 1947-71

Year	On vessels			On boats and shore						Total fishermen on vessels, boats, and shore		
	New England	Middle Atlantic	Total on vessels	New England			Middle Atlantic				Total on boats and shore	
				Reg.	Casual	Number	Reg.	Casual	Reg.		Casual	
1947	52	-	52	5,041	3,468		73	78	5,114	3,546	8,712	
1948	66	-	66	4,842	2,857		121	117	4,963	2,974	8,003	
1949	77	4	81	4,998	2,704		119	215	5,117	2,919	8,117	
1950	61	6	67	5,024	1,928		90	115	5,114	2,043	7,224	
1951	66	4	70	4,633	1,775		57	73	4,690	1,848	7,608	
1952	65	4	69	4,790	2,094		57	120	4,847	2,214	7,130	
1953	69	4	73	5,017	2,105		66	152	5,083	2,257	7,413	
1954	90	11	101	5,506	2,037		55	41	5,561	2,078	7,740	
1955	62	-	62	5,093	2,580		46	-	5,139	2,580	7,781	
1956	44	19	63	4,955	2,812		51	36	5,006	2,848	7,917	
1957	37	25	62	5,057	2,566		44	48	5,101	2,777	7,777	
1958	40	23	63	4,825	3,141		43	45	4,868	3,186	8,117	
1959	35	24	59	4,954	3,339		42	32	4,996	3,371	8,426	
1960	37	32	69	5,106	3,429		37	27	5,143	3,456	8,668	
1961	51	32	83	4,834	3,495		38	22	4,872	3,517	8,472	
1962	44	31	75	4,440	3,145		32	21	4,472	3,166	7,713	
1963	49	35	84	3,538	3,840		29	27	3,567	3,867	7,518	
1964	59	33	92	3,679	4,041		29	30	3,708	4,071	7,871	
1965	60	36	96	3,760	4,058		34	32	3,794	4,090	7,980	
1966	45	32	77	3,803	3,559		44	77	3,847	3,636	7,560	
1967	52	29	81	3,766	3,467		57	96	3,823	3,563	7,467	
1968	81	50	131	3,873	3,646		75	125	3,948	3,771	7,850	
1969	115	49	164	3,917	3,932		118	147	4,035	4,079	8,278	
1970	141	77	218	4,472	4,347		167	194	4,639	4,541	9,398	
1971	210	185	395	4,709	4,123		218	234	4,927	4,357	9,679	

1/ Includes 19 fishermen on vessels in Virginia.

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-3.--Number of vessels and boats in the American lobster pot fleet by region, 1947-71

Year	Vessels			Boats						Total vessels and boats	
	Total vessels			Motor		Other		Total boats			
				Motor		Other		Total boats			
				N. E.	M. A.	N. E.	M. A.	N. E.	M. A.		N. E.
-----Number-----											
1947	37	-	37	70	5,933	6,003	2,100	6	2,106	8,109	8,146
1948	51	-	51	132	5,906	6,038	1,303	12	1,315	7,353	7,404
1949	59	2	61	167	6,192	6,359	1,179	19	1,198	7,557	7,618
1950	53	3	56	103	5,869	5,972	815	15	830	6,802	6,858
1951	44	2	46	67	5,444	5,511	743	-	743	6,254	6,300
1952	49	2	51	92	5,678	5,770	874	-	874	6,644	6,695
1953	57	2	59	109	5,993	6,102	402	-	402	6,504	6,563
1954	69	5	74	45	6,641	6,57	657	20	677	7,363	
1955	53	-	53	32	6,820	6,852	629	-	629	7,481	7,534
1956	35	9	44	38	6,863	6,901	608	20	628	7,529	7,573
1957	32	12	44	44	6,938	6,982	411	20	431	7,413	7,457
1958	36	11	47	42	7,025	7,067	440	20	460	7,527	7,574
1959	31	12	43	40	7,765	7,805	290	10	300	8,105	8,148
1960	31	16	47	35	7,803	7,838	293	10	303	8,141	8,188
1961	43	16	59	33	7,732	7,765	331	10	341	8,106	8,165
1962	39	16	55	42	6,989	7,031	288	-	288	7,319	7,374
1963	40	18	58	43	6,451	6,494	204	-	204	6,698	6,756
1964	46	17	63	48	6,808	6,856	109	-	109	6,965	7,028
1965	51	18	69	52	7,125	7,177	75	-	75	7,252	7,321
1966	40	16	56	96	6,733	6,829	29	-	29	6,858	6,914
1967	43	15	58	106	6,573	6,679	41	-	41	6,720	6,778
1968	53	25	78	151	6,813	6,964	63	-	63	7,027	7,105
1969	54	25	79	217	7,408	7,625	24	-	24	7,649	7,728
1970	56	42	98	294	8,339	8,633	25	-	25	8,658	8,756
1971	73	68½	141	354	8,370	8,724	11	-	11	8,735	8,876

1/ Includes 3 vessels in Virginia.

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-4.--Gear in the American lobster pot fishery by region, 1947-71

Year	Pots			
	New England	Middle Atlantic	Chesapeake	Total
	Number			
1947	660,961	13,329	-	674,290
1948	598,425	18,913	-	617,338
1949	601,786	9,786	-	611,572
1950	570,635	8,295	-	578,930
1951	507,927	4,885	-	512,812
1952	540,216	4,514	-	544,730
1953	564,665	4,416	-	569,081
1954	618,279	9,930	-	628,209
1955	665,269	3,960	-	669,229
1956	654,872	12,015	-	666,887
1957	677,155	11,660	-	688,815
1958	742,091	11,412	-	753,503
1959	845,832	10,962	-	856,794
1960	833,874	10,236	-	844,110
1961	844,535	10,563	-	895,098
1962	899,453	9,865	-	909,318
1963	857,100	9,800	-	866,900
1964	894,653	9,580	-	904,233
1965	937,575	11,470	-	949,045
1966	932,208	14,905	-	947,113
1967	890,159	17,797	-	907,956
1968	935,020	31,315	-	966,335
1969	1,012,022	49,785	-	1,061,807
1970	1,392,432	62,520	-	1,454,952
1971	1,474,128	97,440	3,200	1,564,768

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-5.--Number of fishermen in the American lobster otter trawl fishery by region,
1961-71

Year	On vessels			Total on vessels	On boats and shore			Total fishermen
	New England	Middle Atlantic	Chesapeake		New England	Middle Atlantic	Chesapeake	
-----Number-----								
1961	-	168	-	168	-	3	3	171
1962	-	134	-	134	-	3	3	137
1963	-	134	-	134	-	3	3	137
1964	212	150	-	362	-	3	3	365
1965	296	153	-	425	-	-	-	425
1966	287	141	-	414	-	-	-	414
1967	382	203	51	636	-	-	-	636
1968	469	221	21	711	-	-	-	711
1969	362	270	37	669	-	-	-	669
1970	287	289	57	633	-	-	-	633
1971	260	258	-	518	-	-	-	518

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-6.--Number of vessels and boats in the American lobster otter trawl fishery by region, 1961-71

Year	Vessels				Total vessels	Boats - motor				Total vessels and boats
	New England	Middle Atlantic	Chesapeake	New England		Middle Atlantic	Chesapeake	Total boats		
Number										
1961	-	40	-	40	-	1	-	1	41	
1962	-	34	-	34	-	1	-	1	35	
1963	-	34	-	34	-	1	-	1	35	
1964	36	38	-	74	-	1	-	1	75	
1965	54	39	-	88	-	-	-	-	88	
1966	53	37	-	87	-	-	-	-	87	
1967	73	51	11	135	-	-	-	-	135	
1968	91	55	4	150	-	-	-	-	150	
1969	68	65	7	140	-	-	-	-	140	
1970	54	73	11	138	-	-	-	-	138	
1971	51	68	-	119	-	-	-	-	119	

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-7.--Gear in the American lobster otter trawl fishery by region, 1961-71

Year	Otter trawls			
	New England	Middle Atlantic	Chesapeake	Total Gear
-----Number-----				
1961	-	41	-	41
1962	-	35	-	35
1963	-	35	-	35
1964	36	39	-	75
1965	54	39	-	88
1966	53	37	-	87
1967	73	51	11	135
1968	91	55	4	150
1969	68	65	7	140
1970	54	73	11	138
1971	51	68	-	119

Source: Fishery Statistics of the United States, various years.

Table V-8.--Number of fishermen, vessels, and boats in the U.S. spiny lobster fishery, 1950-71

Year	Fishermen	Vessels and boats
-----Number-----		
1950	721	376
1951	639	319
1952	<u>1/</u>	<u>1/</u>
1953	<u>1/</u>	<u>1/</u>
1954	<u>1/</u>	<u>1/</u>
1955	291	217
1956	363	244
1957	<u>1/</u>	<u>1/</u>
1958	537	352
1959	602	431
1960	653	407
1961	602	365
1962	798	451
1963	661	367
1964	1,020	546
1965	1,061	539
1966	1,216	680
1967	1,363	710
1968	1,454	648
1969	1,297	667
1970	1,295	626
1971	1,363	627

1/ Not available

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-9.--Fishermen in the U. S. spiny lobster fishery,
1947-71

Year	On vessels			
	Florida		California	Total ^{1/}
	East Coast	West Coast		
			Number	
1947	<u>2/</u>	<u>2/</u>	138	<u>2/</u>
1948	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>
1949	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>
1950	2	4	140	146
1951	2	2	121	125
1952	-	-	<u>2/</u>	<u>2/</u>
1953	4	-	<u>2/</u>	<u>2/</u>
1954	-	4	<u>2/</u>	<u>2/</u>
1955	10	4	2	16
1956	10	28	77	115
1957	8	49	<u>2/</u>	<u>2/</u>
1958	11	33	43	87
1959	11	30	41	82
1960	11	29	61	101
1961	13	32	60	105
1962	13	40	103	156
1963	25	44	72	141
1964	41	68	60	169
1965	50	56	102	208
1966	128	104	118	350
1967	156	143	165	464
1968	367	323	221	911
1969	325	1184	214	623
1970	311	287	30	628
1971	383	364	36	783

^{1/} May include some duplication.

^{2/} Not available.

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-9.--Fishermen in the U.S. spiny lobster fishery, 1947-71 (continued)

Year	On boats and shore							
	Florida				California		Total ^{1/}	
	East Coast		West Coast		Regular	Casual	Regular	Casual
	Regular	Casual	Regular	Casual				
	-----Number-----							
1947	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	424	-	<u>2/</u>	<u>2/</u>
1948	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>
1949	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>
1950	68	-	90	-	417	-	575	-
1951	109	2	60	-	343	-	512	2
1952	95	-	71	-	<u>1/</u>	-	<u>1/</u>	<u>1/</u>
1953	173	2	70	-	<u>1/</u>	-	<u>1/</u>	<u>1/</u>
1954	142	15	83	28	<u>1/</u>	-	<u>1/</u>	<u>1/</u>
1955	124	10	61	10	70	-	255	20
1956	57	-	80	18	93	-	230	18
1957	79	6	138	10	<u>1/</u>	-	<u>1/</u>	<u>1/</u>
1958	87	3	106	8	246	-	439	11
1959	107	5	174	20	214	-	495	25
1960	89	2	192	18	251	-	532	20
1961	88	-	170	11	228	-	486	11
1962	88	9	192	7	346	-	626	16
1963	83	8	233	12	184	-	500	20
1964	143	14	238	104	362	-	743	108
1965	163	26	306	24	334	-	803	50
1966	233	24	300	12	298	-	831	35
1967	291	3	330	24	251	-	872	27
1968	74	11	214	12	232	-	520	23
1969	92	9	255	20	298	-	645	29
1970	110	3	331	17	206	-	647	20
1971	98	6	259	39	178	-	535	45

^{1/}May include some duplication.

^{2/}Not available.

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-10.--Vessels and boats in the U. S. spiny lobster fishery, 1947-71

Year	Vessels				Total vessels	Boats				Total vessels and boats
	Florida		California	Total boats						
	East coast	West coast		Florida		Total boats				
Number										
1947	1/	1/	50	1/	1/	221	1/	1/	1/	
1948	1/	1/	1/	1/	1/	1/	1/	1/	1/	
1949	1/	1/	1/	1/	1/	1/	1/	1/	1/	
1950	1	2	49	52	38	69	217	324	376	
1951	1	1	37	39	73	38	169	280	319	
1952	-	-	1/	48	54	1/	1/	1/	1/	
1953	2	-	1/	90	55	1/	1/	1/	1/	
1954	-	2	1/	84	71	1/	1/	1/	1/	
1955	4	2	1	7	99	61	50	210	217	
1956	4	14	47	65	53	57	69	179	244	
1957	3	3	1/	1/	50	83	1/	1/	1/	
1958	4	17	20	41	78	88	145	311	352	
1959	4	17	27	48	74	159	150	383	431	
1960	4	16	25	45	49	152	163	362	407	
1961	5	16	26	47	50	124	144	318	365	
1962	5	20	41	66	72	151	162	385	451	
1963	10	24	29	63	50	162	92	304	367	
1964	13	34	34	71	80	214	181	475	546	
1965	18	28	41	87	98	188	166	452	539	
1966	54	58	43	155	166	210	149	525	680	
1967	65	75	57	197	164	224	125	513	710	
1968	128	137	80	345	52	135	116	303	648	
1969	113	93	77	283	59	176	149	384	667	
1970	103	123	21	247	52	214	103	369	616	
1971	128	142	18	288	55	195	89	339	627	

1/ Not available.

Source: Fishery Statistics of the United States, various years.

DOMESTIC EMPLOYMENT, VESSELS, AND EFFORT

Table V-11.--Gear in the U.S. spiny lobster fishery, 1947-71

Year	Florida		California	Total
	East Coast	West Coast		
	-----Number of traps-----			
1947	<u>1/</u>	<u>1/</u>	7,918	<u>1/</u>
1948	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>
1949	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>
1950	5,795	5,715	8,162	19,672
1951	12,312	4,625	3,855	22,792
1952	10,350	4,500	<u>1/</u>	<u>1/</u>
1953	19,274	6,500	6,695	32,469
1954	18,755	11,690	7,570	38,015
1955	26,342	12,700	7,200	46,242
1956	16,150	16,775	11,798	44,723
1957	14,915	21,720	12,693	49,328
1958	11,095	23,221	13,910	48,226
1959	18,100	33,612	15,652	67,364
1960	18,990	54,640	11,572	85,202
1961	13,360	38,990	10,965	63,315
1962	16,140	58,250	13,660	88,050
1963	20,240	60,050	8,180	88,470
1964	40,100	73,553	13,600	127,253
1965	49,200	89,700	14,307	153,207
1966	76,420	74,550	17,771	168,741
1967	94,125	91,800	16,065	201,990
1968	69,890	98,500	17,227	185,617
1969	67,700	96,955	20,153	184,808
1970	69,050	150,050	12,400	231,500
1971	78,825	147,037	10,700	236,562

1/Not available.

Source: Fishery Statistics of the United States, various years.

VI. BIOLOGICAL STOCK ASSESSMENT

Table VI-1.--Estimates of maximum sustainable yield from world
stocks of lobster

Region	MSY
	Thousand metric tons
I. Atlantic Northwest	
A. <u>Homarus americanus</u>	32.0
II. Atlantic Northeast	
A. <u>Homarus vulgaris</u>	3.3
B. <u>Palinurus vulgaris</u>	2.0
C. <u>Nephrops norvegicus</u>	60.0
Total	65.3
III. Mediterranean	
A. <u>Homarus vulgaris</u>	1.0
B. <u>Nephrops norvegicus</u>	3.0
Total	4.0
IV. North Pacific	--
V. Atlantic West-Central	
A. <u>Palinurus</u> spp.	21.0
VI. Atlantic East-Central	
A. <u>Palinurus mauretanicus</u>	2.0
B. <u>Palinurus charlestoni</u>	1.0
C. <u>Palinurus rissonii</u>	1.0
Total	4.0
VII. Indian West	
A. Spiny lobsters ¹ /	3.1
VIII. Indian East	
A. Spiny lobsters ² /	10.0

BIOLOGICAL STOCK ASSESSMENT

Table VI-1.---Estimates of maximum sustainable yield from world stocks of lobster (continued)

Region		MSY
		Thousand metric tons = 2205
IX.	Pacific West-Central	
	A. Spiny lobsters	5.0
X.	Pacific East-Central	
	A. Spiny lobsters ^{3/}	5.0
XI.	Atlantic Southwest	
	A. <u>Panulirus argus</u>	4.0
XII.	Atlantic Southeast	
	A. <u>Jasus lalandii</u>	10.5
	B. <u>Palinurus</u> spp.	1.0
	Total	11.5
XIII.	Pacific Southwest	
	A. <u>Jasus lalandii</u>	14.5
XIV.	Pacific Southeast	
	A. <u>Jasus frontalis</u>	0.1
	World Total	179.5

1/ Includes Jasus lalandii, Palinurus gilchristi, Palinurus homarus, Palinurus longipes, Palinurus ornatus, Palinurus penicillatus, Palinurus versicolor.

2/ Includes Jasus lalandii, Panulirus cygnus, Panulirus versicolor.

3/ Includes Panulirus inflatus, Panulirus interruptus.

Source: Longhurst, Alan R. 1970. "Survey of Crustacean Resources," in The Fish Resources of the Ocean, J. A. Gulland (editor). Food and Agriculture Organization of the United Nations, 255 p.

BIOLOGICAL STOCK ASSESSMENT

Table VI-2.--Estimate of maximum sustainable yield for lobsters
in waters fished by U. S. fishermen.

Region	Lobsters	MSY
		<u>Thou. metric tons</u>
I. Northwest Atlantic	American	45.0
II. West-Central Atlantic	Spiny	21.0
	Total	<u>66.0</u>

Source: Longhurst, Alan R. 1970. "Survey of Crustacean Resources," in The Fish Resources of the Ocean, J. A. Gulland (editor). Food and Agriculture Organization of the United Nations, 255 p.

VII. INTERNATIONAL TRADE

Table VII-1.--Quantity and value of fresh and frozen lobster imports
to the U.S., 1947-73

(Product weight)

Year	American ^{1/}		Spiny ^{2/}	
	Quantity	Value	Quantity	Value
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1947	18,401	8,902	6,314	2,691
1948	20,850	9,289	7,757	3,971
1949	21,323	9,804	9,356	5,109
1950	22,046	10,693	12,927	6,484
1951	23,558	11,144	14,758	8,613
1952	23,197	12,966	15,813	10,751
1953	22,610	13,279	19,942	14,426
1954	22,468	12,271	19,760	14,329
1955	22,962	13,430	22,479	16,674
1956	22,484	13,722	25,258	20,563
1957	22,218	13,073	28,236	23,754
1958	21,413	13,474	25,938	22,187
1959	20,635	13,802	28,092	24,833
1960	21,403	14,018	32,346	30,750
1961	21,299	14,571	32,610	34,468
1962	22,101	15,000	35,947	42,182
1963	21,847	16,259	34,048	38,214
1964	20,386	16,041	35,104	43,547
1965	18,597	7,421	37,814	61,280
1966	17,047	15,521	36,923	61,054
1967	15,568	15,070	35,340	56,449
1968	16,753	16,388	43,062	82,648
1969	17,447	18,381	44,990	94,327
1970	17,114	18,991	37,740	74,801
1971	17,835	23,653	41,794	105,722
1972	16,229	25,863	43,009	127,490
1973	15,902	25,871	38,360	121,953

^{1/} Includes fresh cooked meat and live lobsters.

^{2/} Import weight, consisting largely of tails.

Source: U.S. Imports, Bureau of the Census, 1947-72.

INTERNATIONAL TRADE

Table VII-2.--Quantity and value of canned lobster imports to the
U. S., 1947-73

(Product weight)

Year	American		Spiny	
	Quantity	Value	Quantity	Value
	<u>Thousand</u> <u>pounds</u>	<u>Thousand</u> <u>dollars</u>	<u>Thousand</u> <u>pounds</u>	<u>Thousand</u> <u>dollars</u>
1947	1,072	1,310	142	136
1948	1,639	2,477	1,073	754
1949	1,410	2,089	696	521
1950	2,010	2,631	2,610	1,564
1951	1,499	1,996	1,966	1,401
1952	1,982	2,792	2,621	1,905
1953	1,186	2,178	2,978	2,550
1954	1,439	2,413	1,172	1,124
1955	2,114	3,595	1,661	1,478
1956	2,139	3,804	1,285	1,227
1957	2,204	3,867	1,067	1,150
1958	2,383	3,494	378	458
1959	2,338	4,099	2,105	2,342
1960	2,406	4,382	533	857
1961	2,772	4,682	56	97
1962	3,111	5,507	198	304
1963	2,362	4,331	281	487
1964	2,817	6,631	193	332
1965	2,851	7,128	129	208
1966	2,861	6,747	157	317
1967	2,715	6,996	149	299
1968	2,451	6,280	213	307
1969	2,470	7,620	302	520
1970	2,381	7,803	102	163
1971	2,292	7,979	105	256
1973	1,650	7,687	135	287

Source: U.S. Imports, Bureau of the Census, 1947-72.

VIII. FOREIGN PRODUCTION

Table VIII-1---World lobster landings by country, 1947-72

(Round weight)

Year	Australia	Canada	Chile	Cuba	France	New Zealand
<u>Million pounds</u>						
1947	<u>1/</u>	36.4	<u>1/</u>	<u>1/</u>	11.2	2.0
1948	<u>1/</u>	40.3	<u>1/</u>	<u>1/</u>	8.6	3.0
1949	<u>1/</u>	43.2	<u>1/</u>	<u>1/</u>	11.5	4.2
1950	<u>1/</u>	49.8	<u>1/</u>	<u>1/</u>	11.7	6.0
1951	<u>1/</u>	50.0	<u>1/</u>	<u>1/</u>	11.2	6.4
1952	14.6	47.8	<u>1/</u>	<u>1/</u>	13.2	7.5
1953	15.7	46.5	2.0	<u>1/</u>	13.9	9.0
1954	17.4	46.7	5.7	<u>1/</u>	13.7	12.1
1955	19.8	48.5	4.4	<u>1/</u>	14.3	13.0
1956	18.3	51.8	12.6	6.2	14.6	14.6
1957	19.0	44.5	<u>1/</u>	13.2	19.2	11.0
1958	22.1	43.0	28.4	<u>1/</u>	19.6	9.7
1959	26.5	45.6	14.1	<u>1/</u>	22.7	8.8
1960	28.0	50.0	17.9	<u>1/</u>	23.8	8.4
1961	27.6	47.6	17.9	18.1	29.3	8.8
1962	28.9	46.5	17.6	16.5	27.1	10.1
1963	31.5	44.3	20.3	16.3	26.2	9.9
1964	27.6	41.9	23.8	14.6	26.5	10.1
1965	26.5	40.6	34.2	20.1	22.1	11.0
1966	30.0	37.5	29.8	19.8	24.0	14.6
1967	31.8	35.1	44.3	18.3	20.7	17.9
1968	33.3	37.5	42.1	19.6	21.2	24.0
1969	28.9	40.1	59.3	24.5	27.3	19.6
1970	25.4	36.6	89.3	17.6	24.5	14.6
1971	28.4	38.1	89.3	20.3	22.0	12.6
1972	28.7	33.1	83.1	20.3	23.4	10.1

FOREIGN PRODUCTION

Table VIII-1 ---World lobster landings by country, 1947-72^{1/}
(continued)

(Round weight)

Year	South Africa	South West Africa	U.K.	U.S.	Other	Total
-----Million pounds-----						
1947	22.9	3.3	2.9	25.6	10.4	114.6
1948	24.0	10.6	3.3	22.3	11.2	123.5
1949	24.9	13.0	3.1	27.6	11.5	138.9
1950	28.0	14.3	2.9	25.6	11.7	149.9
1951	30.0	16.1	2.4	30.0	10.4	156.5
1952	30.0	28.9	2.2	27.6	13.5	185.2
1953	30.0	22.7	2.9	30.6	29.5	202.8
1954	27.1	20.1	4.6	30.0	29.8	207.2
1955	27.1	20.3	6.6	32.2	40.8	227.1
1956	24.0	14.1	6.6	30.2	40.8	233.7
1957	28.0	17.0	7.7	34.8	19.4	213.9
1958	28.0	8.8	7.7	30.9	46.5	244.7
1959	20.1	11.5	10.4	32.6	52.5	244.7
1960	20.5	8.4	9.5	34.4	61.5	262.4
1961	19.6	12.8	12.4	31.3	42.3	269.0
1962	19.2	15.9	13.2	33.1	47.4	275.6
1963	18.3	13.0	14.8	34.4	53.1	282.2
1964	18.5	16.8	17.6	34.8	58.9	291.0
1965	18.5	17.6	16.8	36.4	54.0	306.4
1966	17.6	19.6	19.6	35.3	54.2	308.6
1967	18.3	13.0	23.2	31.5	54.5	308.6
1968	35.7	2/	24.5	40.1	52.7	330.7
1969	24.9	2/	28.2	42.6	66.2	361.6
1970	22.9	2/	28.2	44.5	53.5	357.1
1971	17.2	2/	31.5	41.7	60.5	361.6
1972	18.3	2/	37.0	41.0	79.8	374.8

^{1/} Not available.

^{2/} Southwest Africa (Namibia) now reported with South Africa.

Note: World landings include all species of lobster.

Source: Yearbook of Fishery Statistics, F.A.O., 1947-71.

FOREIGN PRODUCTION

Table VIII-2.--World lobster landings, international trade, and consumption, 1972

(Round weight)

Country	Landings	Exports	Imports	Apparent consumption
-----Million pounds-----				
Australia	28.7	28.7	-	-
Canada	33.1	28.6	-	4.5
Chile	83.1	9.0	-	74.1
France	23.4	.6	-	22.8
New Zealand	10.1	10.1	-	-
South Africa ^{1/}	18.3	14.6	-	3.7
United Kingdom	37.0	1.9	-	35.1
U. S.	41.0	-	169.9	210.9
Other	100.1	96.5	20.1	23.7
Total	374.8	190.0	190.0	374.8

^{1/} Includes data for Southwest Africa (Namibia)

Source: Yearbook of Fishery Statistics, F. A. O., 1972.

IX. FOREIGN CONSUMPTION

Table IX-1.--World lobster consumption by major consuming countries,
1947-72

(Round weight)

Year	France	U.K.	Canada	U.S.	Other	Total
	-----Million pounds-----					
1947	11.2	2.4	-	66.5	34.5	114.6
1948	8.6	3.3	-	70.7	40.9	123.5
1949	11.5	3.1	5.9	80.5	37.9	138.9
1950	11.7	2.9	7.9	88.8	38.6	149.9
1951	11.2	2.4	10.1	100.2	32.6	156.5
1952	13.2	2.2	5.7	99.8	64.3	185.2
1953	13.9	2.9	12.8	112.9	60.3	202.8
1954	13.7	4.6	12.8	111.8	64.3	207.2
1955	14.3	6.6	9.5	121.2	75.5	227.1
1956	14.6	6.6	15.7	118.3	77.9	233.1
1957	19.2	7.7	7.1	138.0	41.9	213.9
1958	19.6	7.7	6.8	128.1	85.5	244.7
1959	22.7	10.4	10.6	135.2	65.8	244.7
1960	23.8	9.5	11.9	149.4	67.8	262.4
1961	29.3	12.4	6.9	148.2	72.2	269.0
1962	27.1	13.2	4.0	158.9	72.4	275.6
1963	26.2	14.8	7.5	177.0	56.7	282.2
1964	26.5	17.6	9.3	178.9	58.7	291.0
1965	22.1	16.8	8.6	171.3	78.8	297.6
1966	24.0	19.6	11.3	171.0	76.1	302.0
1967	20.7	23.2	6.4	174.5	83.8	308.6
1968	21.2	24.5	7.3	198.4	79.2	330.6
1969	27.3	26.0	8.8	207.9	91.6	361.6
1970	24.5	28.2	9.7	186.3	108.4	357.1
1971	21.7	30.9	2.8	211.8	94.4	361.6
1972	22.8	35.1	4.5	210.9	101.5	374.8

Source: FAO Yearbook of Fishery Statistics, 1947-72.

FOREIGN CONSUMPTION

Table IX-2.--World lobster per capita consumption by major consuming countries, 1947-72

(Round weight)

Year	Canada	U.S.	France	U.K.
<u>Pounds</u>				
1947	1/	0.462	0.273	0.048
1948	1/	.482	.225	.066
1949	0.438	.539	.298	.062
1950	.632	.585	.300	.057
1951	.716	.651	.287	.049
1952	.397	.638	.333	.044
1953	.861	.710	.351	.057
1954	.829	.690	.337	.090
1955	.597	.734	.351	.130
1956	.973	.704	.353	.128
1957	.418	.806	.463	.150
1958	.387	.736	.395	.148
1959	.599	.763	.503	.198
1960	.668	.830	.520	.181
1961	.368	.810	.558	.234
1962	.213	.855	.512	.247
1963	.406	.938	.498	.276
1964	.493	.935	.547	.326
1965	.451	.884	.450	.306
1966	.562	.873	.487	.357
1967	.314	.883	.415	.419
1968	.351	.960	.425	.439
1969	.417	1.033	.542	.464
1970	.453	.914	.483	.502
1971	.130	1.027	.423	.556
1972	.206	1.015	.441	.629

Source: FAO Yearbook of Fishery Statistics, 1947-71.

FOREIGN CONSUMPTION

Table IX-3.--Exvessel prices for lobsters in Canada, France, and the United States in national currencies and deflated U.S. dollars, 1948-72

Year	Canada		France		U.S.		Canada		France		U.S.	
	Price per pound Canadian dollars	Consumer price index 1967=100	Price per pound French francs	Consumer price index 1967=100	Price per pound U.S. dollars	Consumer price index 1967=100	Price per pound Canadian dollars	Consumer price index 1967=100	Price per pound French francs	Consumer price index 1967=100	Price per pound U.S. dollars	Consumer price index 1967=100
1948	0.236	65.2	2/	2/	2/	2/	0.329	2/	2/	2/	2/	2/
1949	.236	67.9	2/	2/	2/	2/	.332	2/	2/	2/	2/	2/
1950	.244	68.8	2/	2/	0.347	2/	.359	2/	2/	2/	0.481	2/
1951	.244	75.9	2/	2/	.344	2/	.319	2/	2/	2/	.442	2/
1952	.277	78.6	2/	2/	.411	2/	.338	2/	2/	2/	.517	2/
1953	.313	77.7	2/	2/	.377	2/	.397	2/	2/	2/	.471	2/
1954	.305	78.6	2/	2/	.373	2/	.389	2/	2/	2/	.463	2/
1955	.340	78.6	1.779	62.7	.382	62.7	.430	62.7	0.633	62.7	.476	62.7
1956	.348	79.5	1.873	63.1	.432	63.1	.435	63.1	.657	63.1	.531	63.1
1957	.326	82.1	1.737	65.4	.373	65.4	.403	65.4	.491	65.4	.442	65.4
1958	.358	83.9	1.890	75.2	.469	75.2	.426	75.2	.445	75.2	.542	75.2
1959	.381	84.8	1.895	79.7	.480	79.7	.455	79.7	.442	79.7	.550	79.7
1960	.361	85.7	2.362	82.4	.454	82.4	.419	82.4	.539	82.4	.512	82.4
1961	.379	86.6	2.157	85.0	.507	85.0	.417	85.0	.491	85.0	.566	85.0
1962	.425	87.5	2.492	85.0	.498	85.0	.438	85.0	.562	85.0	.550	85.0
1963	.480	89.3	2.769	89.5	.539	89.5	.485	89.5	.616	89.5	.588	89.5
1964	.579	91.1	2.769	92.2	.620	92.2	.577	92.2	.608	92.2	.667	92.2
1965	.656	92.9	3.470	94.9	.701	94.9	.642	94.9	.749	94.9	.742	94.9
1966	.588	96.4	3.271	97.3	.711	97.3	.559	97.3	.684	97.3	.731	97.3
1967	.667	100.0	3.742	100.0	.807	100.0	.617	100.0	.761	100.0	.807	100.0
1968	.652	104.1	3.591	104.6	.773	104.6	.579	104.6	.696	104.6	.742	104.6
1969	.734	108.8	3.314	110.9	.830	110.9	.618	110.9	.543	110.9	.756	110.9
1970	.810	112.5	3.761	117.5	.894	117.5	.644	117.5	.585	117.5	.764	117.5
1971	.872	115.6	4.400	124.0	1.028	124.0	.711	124.0	.709	124.0	.847	124.0
1972	1.118	121.2	4.734	131.2	1.164	131.2	.807	131.2	.738	131.2	.929	131.2

1/ Deflated by United States consumer price index 1967=100.

2/ Not available.

Source: Fishery Statistics of the United States, 1950-72 and FAO Yearbook of Fishery Statistics, 1948-72.

X. U.S. TRADE BARRIERS

Table X-1.-- Historical and current U.S. tariff structure for lobster products

Tariff item number	Stat. suffix	Product description	Rate of duty		U.S. imports - 1972	
			: June 30, 1967	: Jan. 1, 1969	: Jan. 1, 1972	: Quantity : Value
						Thou. lb Thou. dollars
114.45		Other shellfish lobster				
		Lobsters:				
		In airtight containers:				
		Other:				
15		Live	Free	Free		2,257 9,232
20		Rock Lobster tails	Free	Free		15,862 23,961
25		Other	Free	Free		34,110 108,870
30			Free	Free		9,267 20,532

Source: U.S. Tariff Commission, Tariff Schedules of the United States Annotated, 1972 and

U.S. Imports, Bureau of the Census, U.S. Department of Commerce.

U.S. TRADE BARRIERS

Table X-2.--Historical synopsis of trade investigations for lobster

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1. Section 9(b) of the Fish and Wildlife Act of 1956
None
 2. Escape Clause under Executive Orders and the T.E.A. of 1951, as amended (T.C.)
None
 3. Section 301 of the T.E.A. of 1962 (T.C.).
None
 4. Section 332 of the T.E.A. of 1930 (Investigations by the Tariff Commission)
None
 5. Antidumping under Antidumping Act of 1921 (Customs Bureau)
None
 6. Countervailing (Section 303 of T.E.A. of 1930 Customs Bureau)
None
-

XI. GOVERNMENT PROGRAMS

Table XI-1.--National Marine Fisheries Service financial assistance programs and expenditures for American lobster, fiscal years 1960-72

Fiscal year contract signed and funds obligated based on application ^{1/}	1960 and 1964 Fishing Fleet Improvement Act		Mortgage Insurance Program		Fisheries Loan Fund	
	Number	Total Government obligations ^{1/} Dollars	Vessels	Value of mortgage Dollars	Vessels receiving loans	Total of loans Dollars
1960	-	-	-	-	2	5,500
1961	-	-	-	-	4	-
1962	-	-	-	-	6	9,950
1963	-	-	-	-	7	27,600
1964	-	-	-	-	7	26,048
1965	-	-	-	-	9	31,042
1966	-	-	-	-	2	8,600
1967	-	-	-	-	5	25,573
1968	-	-	-	-	-	-
1969	-	-	1	400,000	2	10,000
1970	1	62,495	3	926,536	7	59,438
1971	-	-	3	841,536	8	93,487
1972	-	-	11	134,756	-	-
Total	1	2,495	18	2,302,828	52	297,238
Average per vessel		62,495		127,934		5,716

^{1/} Final costs sometimes were higher.

Source: Financial Assistance Division, National Marine Fisheries Service.

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National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
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